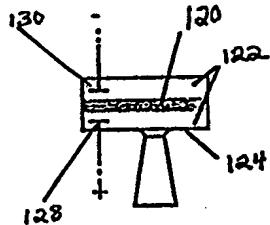




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : C12M 1/34, C12Q 1/68	A3	(11) International Publication Number: <b>WO 98/35012</b>
		(43) International Publication Date: 13 August 1998 (13.08.98)
(21) International Application Number: PCT/US98/03024 (22) International Filing Date: 11 February 1998 (11.02.98) (30) Priority Data: 60/037 921                  12 February 1997 (12.02.97)      US 60/064,687                 5 November 1997 (05.11.97)        US (71)(72) Applicant and Inventor: CHAN, Eugene, Y. [US/US]; 65 Brook Street, Brookline, MA 02146 (US). (74) Agent: KINDREGAN, Helen, C.; Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA 02210 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>  (88) Date of publication of the international search report: 11 February 1999 (11.02.99)
(54) Title: METHODS AND PRODUCTS FOR ANALYZING POLYMERS		
(57) Abstract  Methods and products for analyzing polymers are provided. The methods include methods for determining various other structural properties of the polymers.		
		

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## INTERNATIONAL SEARCH REPORT

Intern: 1al Application No

PCT/US 98/03024

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 6 C12M1/34 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 96 30508 A (RABANI) 3 October 1996	1-10, 19, 27, 29, 30, 33, 34, 36, 38, 39, 68-71, 97, 116-118, 120-122, 133-135, 139-142, 146, 149-152, 156, 157
X	see page 11, line 24 - page 12, line 19 see page 20, line 35 - line 39 see page 25, line 23 - line 28 see page 32, line 7 - line 28 see page 56, line 4 - line 6 -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

23 September 1998

Date of mailing of the international search report

17. 12. 98

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 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
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## INTERNATIONAL SEARCH REPORT

Internat al Application No

PCT/US 98/03024

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	see page 62, line 13 - line 23 see page 64, line 34 - line 39 see page 80, line 7 - line 20 see page 96, line 3 - line 9 see page 96, line 18 - page 97, line 22 see page 124, line 28 - page 125, line 21 see page 162, line 11 - page 167, line 36 see figure 9	32, 41-46, 48-54, 56-60, 64,65, 67,101, 136-138, 199-202, 205 108,109, 114,115
Y		
X	--- US 5 538 898 A (WICKRAMASINGHE) 23 July 1996 see column 2, line 10 - line 21 see column 5, line 5 - line 24 see column 7, paragraph 1 - paragraph 2 see column 8, line 3 - line 28 see column 8, line 37 - line 44 see column 10, line 27 - line 29 see column 13, line 1 - line 40 see column 17, line 52 - line 54	29-31, 227-229
Y	-----	108,109, 114,115

# INTERNATIONAL SEARCH REPORT

Int. l. application No.

PCT/US 98/03024

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

- |                                     |                     |
|-------------------------------------|---------------------|
| 1. CLAIMS : 1-159, 199-205, 227-229 | 2. CLAIMS : 160     |
| 3. CLAIMS : 161-176, 206-226        | 4. CLAIMS : 177-193 |
| 5. CLAIMS : 194-198                 |                     |

FOR FURTHER INFORMATION PLEASE SEE FORM PCT/ISA/206 MAILED 16.10.98

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-159, 199-205, 227-229

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

1. Claims: 1-159,199-205,227-229

Method for analyzing a polymer.

2. Claim : 160

Method for detecting resonance energy transfer.

3. Claims: 161-176,206-226

Apparatus with housing and buffer chamber.

4. Claims: 177-193

Method for determining the relatedness of polymers.

5. Claims: 194-198

Method for labeling nucleic acids.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 98/03024

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 9630508	A	03-10-1996	AU	5525296 A	16-10-1996
US 5538898	A	23-07-1996	EP	0732584 A	18-09-1996